

**MAJOR ISSUES**  
**CONCERNING SALVAGE AND MARINE FIREFIGHTING**

**From the August 5, 1997 Vessel Response Plan Workshop**

A Report Prepared by the  
U.S. Coast Guard Office of Response and  
The Maritime Association of the Ports of New York and New Jersey

## DEDICATION

*The Coast Guard and the Maritime Association of the Ports of New York and New Jersey dedicate this report to the late Captain Paul Preus, whose contributions were invaluable. His spirit and enthusiasm in addressing our nation's salvage and marine firefighting capability was undaunted and relentless. We should all strive to follow his example.*

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## INTRODUCTION

A workshop held by the U.S. Coast Guard's Office of Response and the Maritime Association of the Ports of New York and New Jersey identified major salvage and marine firefighting issues. The enclosed report documents these issues. This report provides the workshop attendees with a record of the workshop and makes planners aware of salvage and marine firefighting concerns.

The Workshop, held on August 5, 1997, addressed the vessel response plan requirements concerning salvage and marine firefighting (see enclosure (1) for complete text excerpts). Title 33 of the Code of Federal Regulations, Part 155, Subparts 1050 and 1052 require owners or operators of vessels carrying oil to identify salvage and marine firefighting companies in their plans. These companies must have the capability of being deployed, to the port nearest where the vessel operates, within 24 hours following notification of an incident. The time requirement becomes effective on February 18, 1998. The Coast Guard decided that a workshop was necessary to determine the best way to ensure consistent and adequate salvage and marine firefighting resources are listed in the vessel response plans. The workshop also reviewed the 24 hour requirement.

The workshop was structured to identify major issues concerning salvage and marine firefighting in the vessel response plan context. To accomplish this, workshop attendees were asked to list their top 3 issues concerning marine salvage and firefighting on a survey form. Attendees were divided into 3 workshop groups (Red, White and Blue). A Coast Guard Officer and a Maritime Law Attorney, representing the Maritime Association of the Ports of New York and New Jersey facilitated the workgroups.

The groups identified the major issues, prioritized and categorized them. Enclosure (2) summarizes the issues and shows their distribution across the workgroups.

# **CHAPTER 1**

## **ACTIVITIES OF THE RED GROUP**

### **A. Rank of Categories according to Issue Votes**

The group identified eight categories of issues. Below is a list of categories, prioritized by the group:

1. Standards and Codes
2. Operational Concerns
3. Funding
4. Risk Assessment
5. Training
6. General
7. Response Time
8. Equipment

### **B. Summary of Workgroup Discussion of the Issues**

1. The workgroup chose to discuss the top two issues in each category. The following is a summary of these discussions, with those receiving the highest votes discussed first.
2. Qualifications and Standards for Private Contractors.
  - a. Many public firefighters were concerned about inadequately trained private contractors posing a safety risk during an incident. They argued that private contractors should meet a performance standard. They argued further that the Coast Guard should not be the proficiency certifying agency.
  - b. The salvors argued that they could evaluate their own industry. Many felt that market incentives prevent the deficient salvors from operating. Evaluation should take the form of self-policing. They stressed that a federal program of evaluation, similar to the Coast Guard's Oil Spill Removal Organization would be counterproductive.
  - c. The group expressed that good qualifications and standards would help avert federal assumption of an incident by ensuring the adequacy of a response.
3. Private and Public Resources
  - a. A majority of the group members agreed that public resources should count in the planning process.
  - b. Some members argued that many public firefighters are not prepared for a large ship-board fire.
  - c. The group agreed that private and public resources should follow the same standards.

#### 4. Response Times

- a. Many strongly opposed the 24 hour requirement. The group reached agreement that any time requirements must be a maximum (as opposed to a minimum) response time.
- b. Planners expressed a need for resource dispatch times rather than arrival times. They suggested a 24 hour response time for expertise to be on scene.
- c. The group collectively agreed that dispatch times of 12 hours for expertise and 24 hours for equipment are reasonable.

#### 5. Training, Experience, Skills and Knowledge

- a. Many felt that Federal On-Scene Coordinators need more training in salvage and marine firefighting. These members also stated that On Scene Coordinators need more involvement with salvage and marine firefighting, rather than delegating decisions down to a representative.
- b. The group agreed that public and private organizations need standardized training.
- c. Firefighters expressed a need for getting public firefighters trained on facility and vessel structure and operations.
- d. The group generally agreed that training should not be covered in the regulations. More appropriate for regulations would be a requirement for labor experience levels.

#### 6. Funding

- a. Firefighters identified a shortfall in training funds for shipboard firefighting.
- b. Contract requirements and liability during a response are of concern to salvors.
- c. Many group members identified a need for addressing funding for equipment shortfalls.

#### 7. Risk Assessment

- a. Planholders argued against additional regulations prescribing resources for salvage and marine firefighting. Historically, they argued, response to salvage and marine firefighting incidents has been adequate. They did stress a need to keep the Area Contingency Plans current.
- b. Both salvors and firefighters argued for port-specific risk assessments, prior to promulgating regulations. They contended that collection and evaluation of data is necessary prior to developing planning requirements.

#### 8. Pre-staged Equipment

- a. Many group members indicated a need for pre-staging equipment to ensure successful operations.
- b. Firefighters identified shortfalls of equipment at many coastal facilities.
- c. A concern of the planholders was matching properly trained personnel to existing and future equipment stockpiles.
- d. Public firefighters felt a need for accessing facility and vessel firefighting equipment. They stressed that a system for accessing these resources was not in place.
- e. Most of the group members felt that the issue of pre-staged equipment is more appropriate in the Area Contingency Plan forum as opposed to vessel response plan regulations.

#### 9. Roles and Responsibilities

- a. The majority of the group stressed a need to clearly define roles and responsibilities. Members identified conflict between National Contingency Plan provisions and State regulations as to who is in charge during a vessel incident, especially when the vessel is alongside a facility.
- b. Salvors wanted a clearer definition of the authority of the salvage master on scene.
- c. The group identified a need for defining the role of the Qualified Individual during a salvage and marine firefighting incident.

## **CHAPTER 2: ACTIVITIES OF THE WHITE GROUP**

### **A. Categorization and Prioritization of the Issues by the Members of the Workgroup**

The members identified ten categories of issues. Below is a list of categories prioritized by the group:

1. Salvage and Firefighting Equipment Qualifications
2. Salvage Contracting
3. Salvage and Firefighting Personnel Qualifications and Training
4. Command and Control of Salvage and Firefighting
5. Qualified Individuals
6. Response Times
7. Funding
8. Area/National Contingency Plan Issues
9. Salvage Liability
10. Non-Specific Issues

### **B. Summary of Workgroup Discussion of the Issues**

1. The workgroup focused on the *specific* issues that received the top votes overall. Due to time constraints, only four issues were discussed. They were:
  - a. Salvage and Firefighting Personnel Qualifications and Training
  - b. Salvage and Firefighting Qualifications for Equipment
  - c. Salvor's Role in the Incident Command System
  - d. Response Times in the Regulations
2. Discussion of Salvage and Firefighting Personnel Qualifications and Training
  - a. The group recommended researching international standards for certifying salvors and marine firefighters.
  - b. The group felt that industry could develop its own standards, with the realization that they must give the Coast Guard assurance that they are adequately meeting the intent of the Oil Pollution Act of 1990.
  - c. Many felt that the burden of identifying qualified salvors and firefighters was the responsibility of the plan holder. It was contended that the planners would hold themselves accountable because it was in their best economic interest. Therefore, regulations are not needed. Along these same lines, several group members felt that market incentives and pressure from insurance underwriters, would force the planholder to contract out the best possible salvage and marine firefighting resources. Some suggested that proof of salvor's liability insurance coverage can act as a marker for adequate salvor's in a plan.
  - d. There was group consensus that a government qualification system should not be established.



- e. Arguing against regulations, many asserted that provisions exist for dealing with salvors and/or marine firefighters that prove to be inadequate during a response. For example, the Coast Guard can assume direction of the spill under the Oil and Hazardous Substances National Contingency Plan.
  - f. Some in the group felt that existing and future state requirements must be considered in amending the regulations.
  - g. Many argued for a need to establish benchmark qualification levels.
  - h. Several group members felt that salvors and marine firefighters need to play a larger role in exercises and drills to demonstrate and practice their skills.
3. Discussion of Salvage and Firefighting Equipment Standards
- a. Many agreed that regulations could define minimal equipment standards. Some cautioned that meeting minimal equipment standards alone may not ensure an adequate salvor or marine firefighter.
  - b. Some members in the group suggested that the salvage master be required to be on-scene initially to determine equipment needs.
  - c. It was recommended that salvors provide proof of access to firefighting personnel and equipment. Many felt that it was necessary to clarify whether firefighting resources needed to be on contract with the salvor.
  - d. Some firefighters in the group suggested that adequate firefighting personnel and resources means having a history of actual marine firefighting cases where the equipment was used.
4. Salvage Master's Role in the Incident Command System
- a. Several members of the group felt that the Salvor is buried too deep in the Incident Command System organization. The Salvage Master is either overlooked or minimized in terms of the importance of the overall response. A number of people felt that, so long as a salvage situation existed, the salvage master should retain control over the operation.
  - b. Several people agreed that salvors should play a more prominent role in drills and area exercises that include a salvage component.
5. Response Times
- a. If a response time is decided upon, the group saw a need to identify points where the clock starts and ends. For example, does it start with the Qualified Individual notification, time of the incident or plan holder notification?
  - b. If response times are necessary, provisions must address influencing factors, such as weather and environmental conditions.

- c. Some argued that response times were not necessary. The high cost of a prolonged response and federal government threat of intervention will provide an incentive for plan holders to act quickly.
  - d. Many felt that the plan holders could self-certify to meet the response time requirements. The certification should be available as a public record.
  - e. Others felt that the plan holder should have the flexibility to choose who will respond. The response times should not serve as the sole criteria for adequate salvage and marine firefighting resources. Each scenario is unique and resources must be tailored to meet the specific need and conditions.
  - f. Several members expressed concern that limited plan flexibility will lock planners into a single path of action - deviations requiring approval from the On Scene Coordinator could stall an operation.
6. Other Key Issues Discussed

The following additional issues developed from discussions of the issues above.

- a. Regulations should require an early assessment by a salvage master. Several people felt that the salvage master should have the final authority to make salvage-related recommendations to the Unified Command. Assessments have been conducted in the past by individuals with limited knowledge and lack of expertise. Contractual requirements making an early salvage assessment possible need to be addressed.
- b. The United States should expand requirements to include vessels not covered by the Oil Pollution Act of 1990. In many cases, these vessels pose a greater risk.
- c. The facilitators felt that most of the discussions fell under the general underlying argument of planning standards vs. performance standards. This argument needs to be carefully studied in any future forums dealing with the salvage and marine firefighting requirements.
- d. The group determined that issues appropriate for regulation could be categorized into 5 groups:
  - 1) Expertise and Training Requirements
  - 2) Response Time Requirements
  - 3) Definitions
  - 4) Timely Salvage Assessment
  - 5) Equipment Requirements

## **CHAPTER 3: ACTIVITIES OF THE BLUE GROUP**

### **A. Categorization and Prioritization of the Issues by the Members of the Workgroup**

The members identified seven categories of issues. Below is a list of categories, prioritized by the group:

1. Definition of Key Terms
2. Criteria for Salvor Designation
3. Use of Public Resources
4. Salvage Master Authority
5. Satisfying Planning Requirements
6. Response Time Issues
7. Applicability to Other Vessels than those Regulated by the Oil Pollution Act of 1990.

### **B. Summary of Workgroup Discussion of the Issues**

#### **1. Definition of Key Terms**

- a. The members of the group identified a need to define the key words in the vessel response plan regulations. The following questions emerged:
  - 1) What is a salvage company?
  - 2) What is salvage?
  - 3) What is marine firefighting?
  - 4) What is meant by expertise?
  - 5) What is meant by equipment?
  - 6) What is vessel firefighting capability?
  - 7) What does capable for being deployed in 24 hours mean?
- b. The members agreed that if the regulations remain as currently written, these questions need answering. The group suggested that the Coast Guard define these terms in a Navigation and Vessel Inspection Circular (NAVIC), to meet the February 18, 1998 deadline.

#### **2. Criteria for Salvor Designation**

- a. Members agreed that criteria are needed to designate a salvor. Before this is done, the members decided that a definition of salvage operations is necessary. The group decided to start with the list in the 1994 National Research Council Report on the "Reassessment of the Marine Salvage Posture of the United States."<sup>1</sup> They expanded the list to include other areas of importance. The list follows:

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<sup>1</sup> Gordon W. Paulsen, et al., A Reassessment of the Marine Salvage Posture of the United States, Committee on Marine Salvage Issues, Marine Board, National Research Council, National Academy Press, Washington, D.C., 1994.

Salvage includes:

- 1) wreck removal
- 2) deep water search and recovery
- 3) refloating a stranded vessel
- 4) rescue towing
- 5) shoring, patching, and making temporary repairs
- 6) firefighting services
- 7) lightering
- 8) salvage master direction/activity
- 9) jettison of cargo
- 10) risk assessment/engineering
- 11) salvage engineering

- b. The group discussed substituting salvage capability for salvage company. Many felt that this better meets the intent of the regulations. They commented that international benchmarks may be available for defining capability.
- c. Criteria for marine firefighting was discussed. Comments regarding acceptable capabilities centered around whether a firefighter was extinguishing a vessel fire located:
  - 1) at a pier,
  - 2) in a harbor or at anchorage close to shore,
  - 3) out on the open sea.
- d. Firefighters in the group identified a need for fire prevention requirements on vessels.
- e. Members suggested that the vessel response plan requirements consider vessel onboard firefighting capability.

### 3. Use of Public Resources

- a. Discussion focused on the role local municipal fire departments had in vessel response plans. Many agreed that the current regulatory language refers to commercial firefighting companies, but in many cases, if not most, local firefighting assets would be involved in marine firefighting.
- b. One firefighter suggested that the best way to deal with this issue was to use the Area Contingency Planning (ACP) process to account for local firefighting capability and its role in marine fires. Further discussion highlighted the fact that the vessel response plans could reference and/or be consistent with ACPs. The group agreed that the intergovernmental dimensions of this issue had to be examined in order to clarify the role of public firefighting assets in vessel response plan development.
- c. Many group members wanted clarification on whether or not they could access public salvage entities, such as NAVSUPSALV or Coast Guard Strike Teams. It

was pointed out that these salvage capabilities are currently available only through the Federal On Scene Coordinator.

#### 4. Salvage Master Authority

- a. The question of *who's in charge* of a salvage operation came up throughout many of the discussions. It was agreed that the Federal On Scene Coordinator had ultimate authority and responsibility for ensuring that successful environmental protection and pollution response actions took place; however, several group members expressed concern that in many cases the operational authority of the salvage master and lead firefighter is unclear.
- b. The issue of who's in charge was characterized by a number of group members as a training and Area Contingency Planning issue. It was suggested that these concerns be addressed through additional planning and policy guidance from the Coast Guard. The National Response Team should provide broader policy guidance where there is Environmental Protection Agency and Coast Guard overlap.

## **APPLICABLE TEXT FROM VESSEL RESPONSE PLAN REGULATIONS**

*Title 33, Code of Federal Regulations, Chapter I, Subchapter O, Part 155, Subpart D*

Sec. 155.1050: Response plan development and evaluation criteria for vessels carrying groups I through IV petroleum oil as a primary cargo.

(k)(1) The owner or operator of a vessel carrying groups I through IV petroleum oil as a primary cargo must identify in the response plan and ensure the availability of, through contract or other approved means, the following resources:

(i) A salvage company with expertise and equipment.

(ii) A company with vessel firefighting capability that will respond to casualties in the area(s) in which the vessel will operate.

(2) Vessel owners or operators must identify intended sources of the resources required under paragraph (k)(1) of this section capable of being deployed to the areas in which the vessel will operate. Provider(s) of these services may not be listed in the plan unless they have provided written consent to be listed in the plan as an available resource.

(3) To meet this requirement in a response plan submitted for reapproval on or after February 18, 1998, the identified resources must be capable of being deployed to the port nearest to the area in which the vessel operates within 24 hours of notification.

Sec. 155.1052: Response plan development and evaluation criteria for vessels carrying group V petroleum oil as primary cargo.

The requirements are the same, but listed under different sections ((e) and (f)).

Enclosure (1)

## DISTRIBUTION OF ISSUES ACROSS THE WORKGROUPS

<i>Issue</i>	<b>R</b>	<b>W</b>	<b>B</b>
<b>EQUIPMENT</b>			
The need for prestaged equipment	<i>X</i>	<i>X</i>	
Availability of land based equipment	<i>X</i>		<i>X</i>
Maintenance of equipment	<i>X</i>		
Access to necessary equipment, public or private	<i>X</i>	<i>X</i>	<i>X</i>
Integration of public and private equipment	<i>X</i>	<i>X</i>	<i>X</i>
Equipment amount requirements		<i>X</i>	<i>X</i>
Equipment performance requirements (i.e. tug horsepower)		<i>X</i>	
Development of uniform equipment requirements		<i>X</i>	<i>X</i>
Portable software		<i>X</i>	
Geographic locations of equipment		<i>X</i>	
<b>RESPONSE TIMES</b>			
Expertise should be within 24 hours/not equipment	<i>X</i>	<i>X</i>	
Infrastructure should be on scene within 24 hours	<i>X</i>		
The need for realistic response times	<i>X</i>	<i>X</i>	
Awareness of technology and response times	<i>X</i>	<i>X</i>	
Response times and equipment availability	<i>X</i>	<i>X</i>	<i>X</i>
Are time requirements the proper measurement?		<i>X</i>	
Define response times, start point, end point		<i>X</i>	<i>X</i>
Consider tiered response times			<i>X</i>
Consider all factors that influence response times (environment, etc.)		<i>X</i>	
Are response times necessary?		<i>X</i>	
Will the response time be strict or flexible? Will waivers be applied?		<i>X</i>	
How much time will be allowed for insurer surveys?	<i>X</i>		
<b>FUNDING AND CONTRACTING</b>			
Who pays for prestaged equipment?	<i>X</i>		
Cost of new regulations.		<i>X</i>	
Contract requirements - general	<i>X</i>	<i>X</i>	<i>X</i>
Funding sources	<i>X</i>	<i>X</i>	
Public training costs	<i>X</i>	<i>X</i>	<i>X</i>
Funding government training and support	<i>X</i>	<i>X</i>	<i>X</i>
Protection from liability	<i>X</i>	<i>X</i>	<i>X</i>
Oil Pollution Fund covering private cleanups	<i>X</i>		
Adequate compensation for salvors		<i>X</i>	
Liability for final costs: hull, P&I or cargo owners?		<i>X</i>	
Should vessel owners have flexibility in choice of contractors	<i>X</i>	<i>X</i>	
Enforcement of contracts		<i>X</i>	
Setup of timely contracts		<i>X</i>	<i>X</i>
Limiting cost of contracts	<i>X</i>		

<i>Issue</i>	<b>R</b>	<b>W</b>	<b>B</b>
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<b>QUALIFICATIONS AND EVALUATION STANDARDS</b>			
Qualification program needs to be developed	X	X	X
Their must be ongoing evaluation	X	X	
Existing qualification programs need to be researched	X	X	
Planning requirements vs. performance requirements	X	X	
Who will approve qualifications?	X	X	X
Vessel crews must also be qualified.	X		
Experience vs. technical knowledge: what is the right balance?	X	X	X
The salvage industry should self-qualify themselves.	X		
No Federally Sponsored Qualification Program	X	X	X
How can capability be evaluated over time?	X		
Who will ensure qualifications are maintained?	X		
<b>TRAINING</b>			
Training should be standardized.	X	X	
Incident command system training should be provided to players.	X		
Training should be continuous	X		X
Salvage and firefighting need to be integrated in major exercises.		X	X
Training programs need to be approved.	X		
Firefighters need training on vessel structure and design	X	X	X
Training requirements need to be setup for private industry			X
Training needs to address multiple scenarios		X	
Firefighters need training on Oil Pollution Act of 1990			X
<b>DEFINITIONS</b>			
Define salvage.	X	X	X
Define marine firefighting	X	X	X
Define expertise	X	X	X
Define objectives of salvage	X		
Define objectives of marine firefighting	X		
<b>ROLES AND RESPONSIBILITIES</b>			
When should federal resources assume responsibility for incident?	X		X
Role of Qualified Individual	X	X	X
Determine Private & Public response jurisdictions and interface	X	X	X
Define U.S. Coast Guard role in salvage.	X	X	X
Determine role of salvage company and salvage master	X	X	X
Ensure continued reliance on commercial assets	X	X	X
Define relationship of salvage master and Oil Spill Removal Organization	X		
Define role of Port Authority	X		
Define salvage and firefighting positions in the Unified Command	X	X	X
Define who is in charge at pier and offshore	X	X	X
Determine who has authority for implementing salvage plan		X	
Determine relationship between salvage master and fire chief		X	

<i>Issue</i>	<b>R</b>	<b>W</b>	<b>B</b>
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<b>ROLES AND RESPONSIBILITIES</b>			
Who determines if the response is adequate?	<i>X</i>		<i>X</i>
What is the role of the vessel owner and operator?			<i>X</i>
What is the role of the U.S. Coast Guard?		<i>X</i>	
Who has the responsibility for remediation?			<i>X</i>
Define role of public fire departments.	<i>X</i>	<i>X</i>	<i>X</i>
<b>CONSIDERATIONS IN DEVELOPING REGULATIONS</b>			
Do Area Contingency Plans already address issues and problems?	<i>X</i>		
Ensure environmental regulations do not aggravate response	<i>X</i>	<i>X</i>	
Is there a need for regulations, given history and U.S. capability?	<i>X</i>		
Port Specific Risk Analysis	<i>X</i>		
Risks need to be quantified	<i>X</i>	<i>X</i>	
Must consider interests of environmental organizations	<i>X</i>		<i>X</i>
Must consider individual port capabilities	<i>X</i>	<i>X</i>	
Must ensure expectations are realistic	<i>X</i>		
Purposeful jettisoning of cargo needs to be considered		<i>X</i>	<i>X</i>
Accountability must remain with the planholder			<i>X</i>
<b>ISSUES EXTERNAL TO VESSEL RESPONSE PLAN REGS</b>			
Include ships other than tank vessels for regulation	<i>X</i>	<i>X</i>	<i>X</i>
Include facility fires in regulations	<i>X</i>		
Captain of the Ports should designate Safe Havens	<i>X</i>	<i>X</i>	<i>X</i>